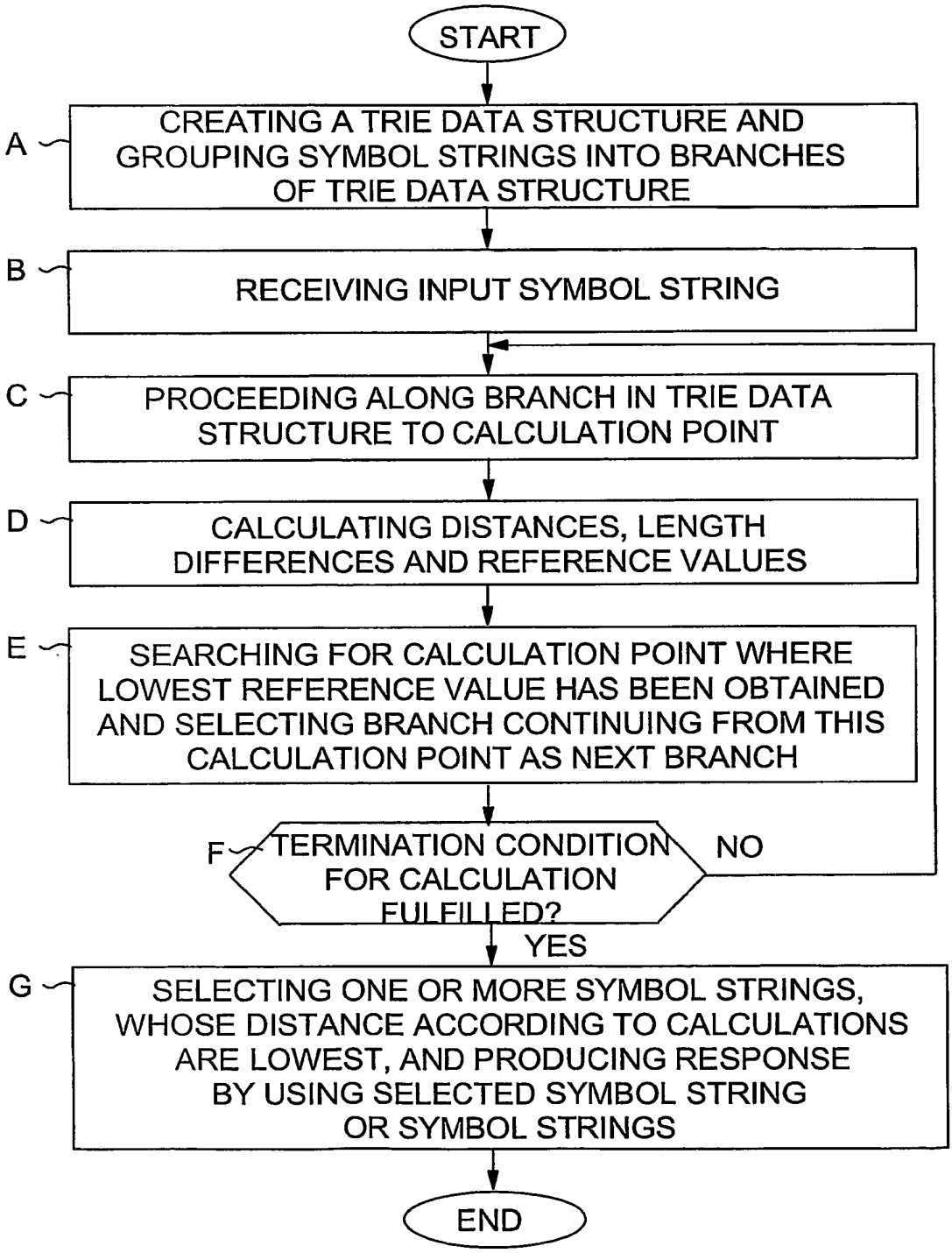
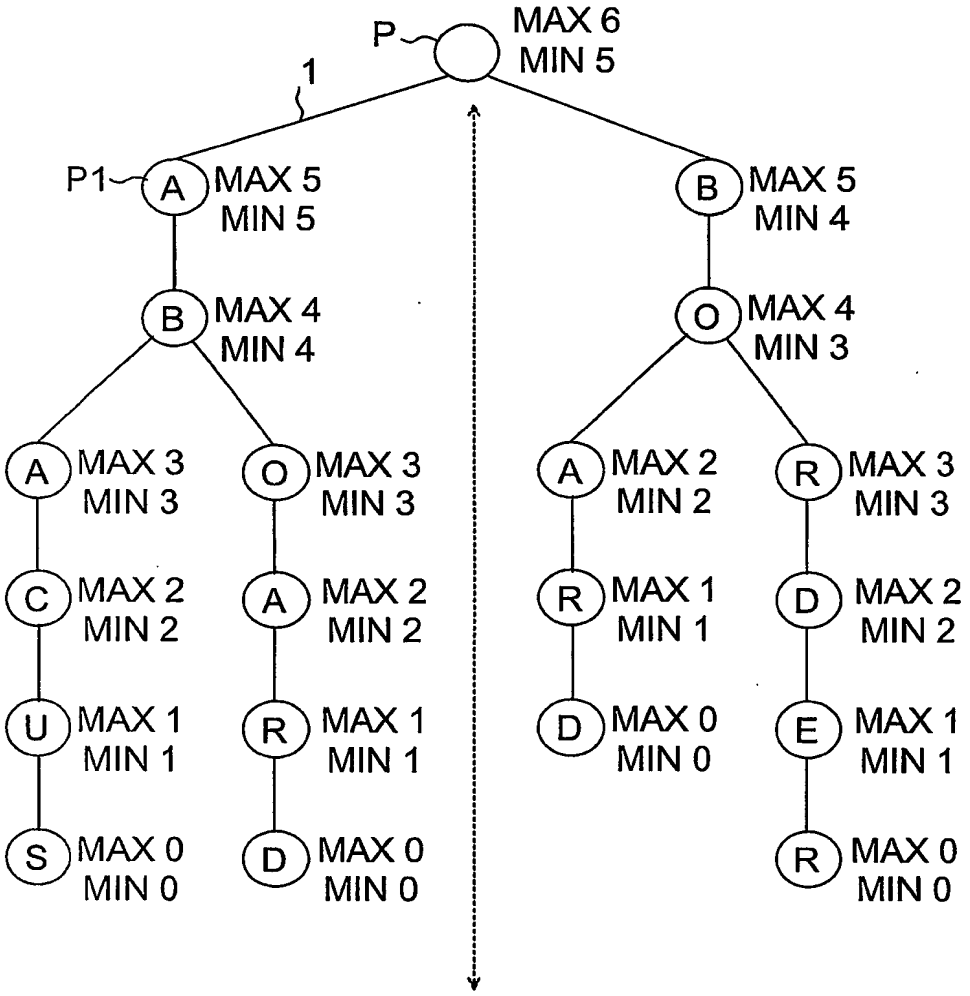
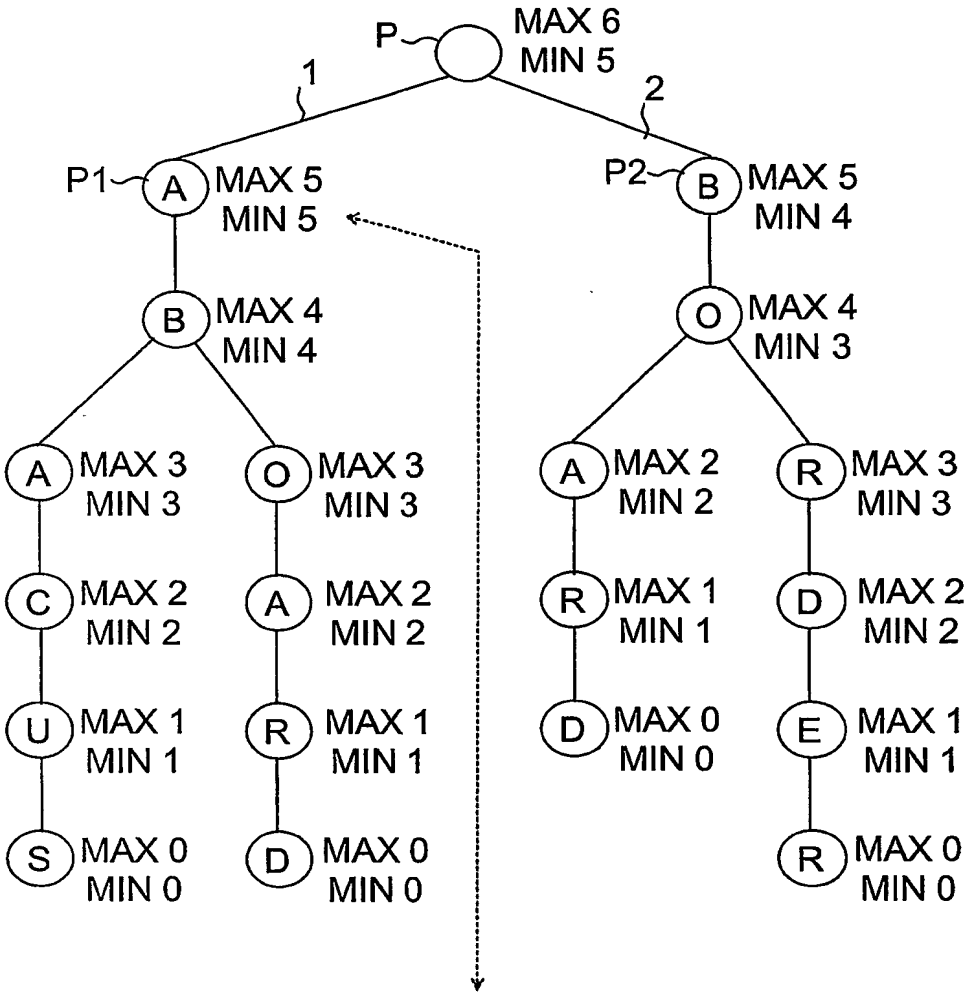

START
A
CREATING A TRIE DATA STRUCTURE AND GROUPING SYMBOL STRINGS INTO BRANCHES OF TRIE DATA STRUCTURE
B
RECEIVING INPUT SYMBOL STRING
C
PROCEEDING ALONG BRANCH IN TRIE DATA STRUCTURE TO CALCULATION POINT
D
CALCULATING DISTANCES, LENGTH DIFFERENCES AND REFERENCE VALUES
E
SEARCHING FOR CALCULATION POINT WHERE LOWEST REFERENCE VALUE HAS BEEN OBTAINED AND SELECTING BRANCH CONTINUING FROM THIS CALCULATION POINT AS NEXT BRANCH
F
TERMINATION CONDITION FOR CALCULATION FULFILLED?
NO
YES
G
SELECTING ONE OR MORE SYMBOL STRINGS, WHOSE DISTANCE ACCORDING TO CALCULATIONS ARE LOWEST, AND PRODUCING RESPONSE BY USING SELECTED SYMBOL STRING OR SYMBOL STRINGS
END

FIG. 1



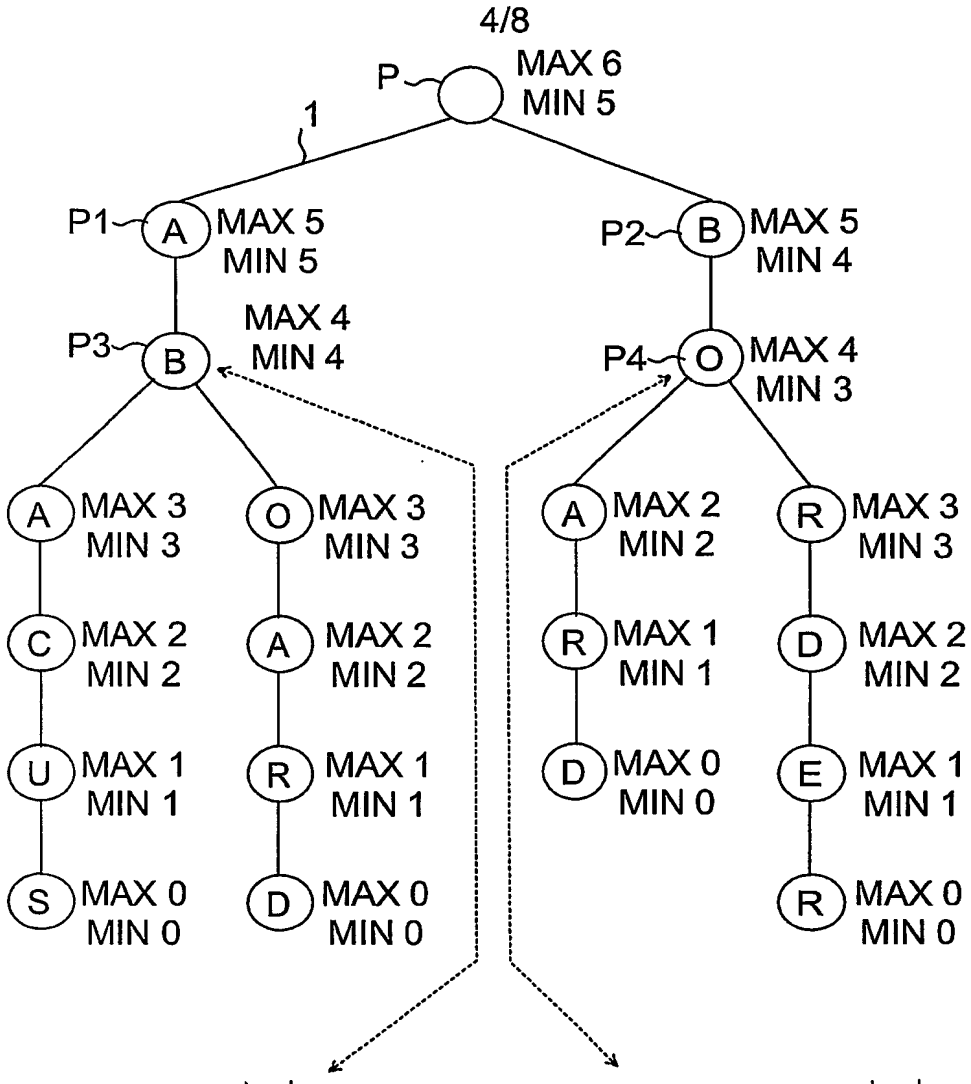
	DISTANCE	LENGTH DIFFERENCE D	REFERENCE VALUE R
	0	5-5=0	0+0=0
A	1	5-4=1	1+1=2
B	2	5-3=2	2+2=4
O	3	5-2=3	3+3=6
R	4	5-1=4	4+4=8
D	5	5-0=5	5+5=10

FIG. 2a



	DISTANCE						LENGTH DIFFERENCE D	REFERENCE VALUE R
		A						
	0	**1**					5-5=0	1+0=1
A	1	**0**					5-4=1	0+1=1
B	2	**1**					5-3=2	1+2=3
O	3	**2**					5-2=3	2+3=5
R	4	**3**					5-1=4	3+4=7
D	5	**4**					5-0=5	4+5=9

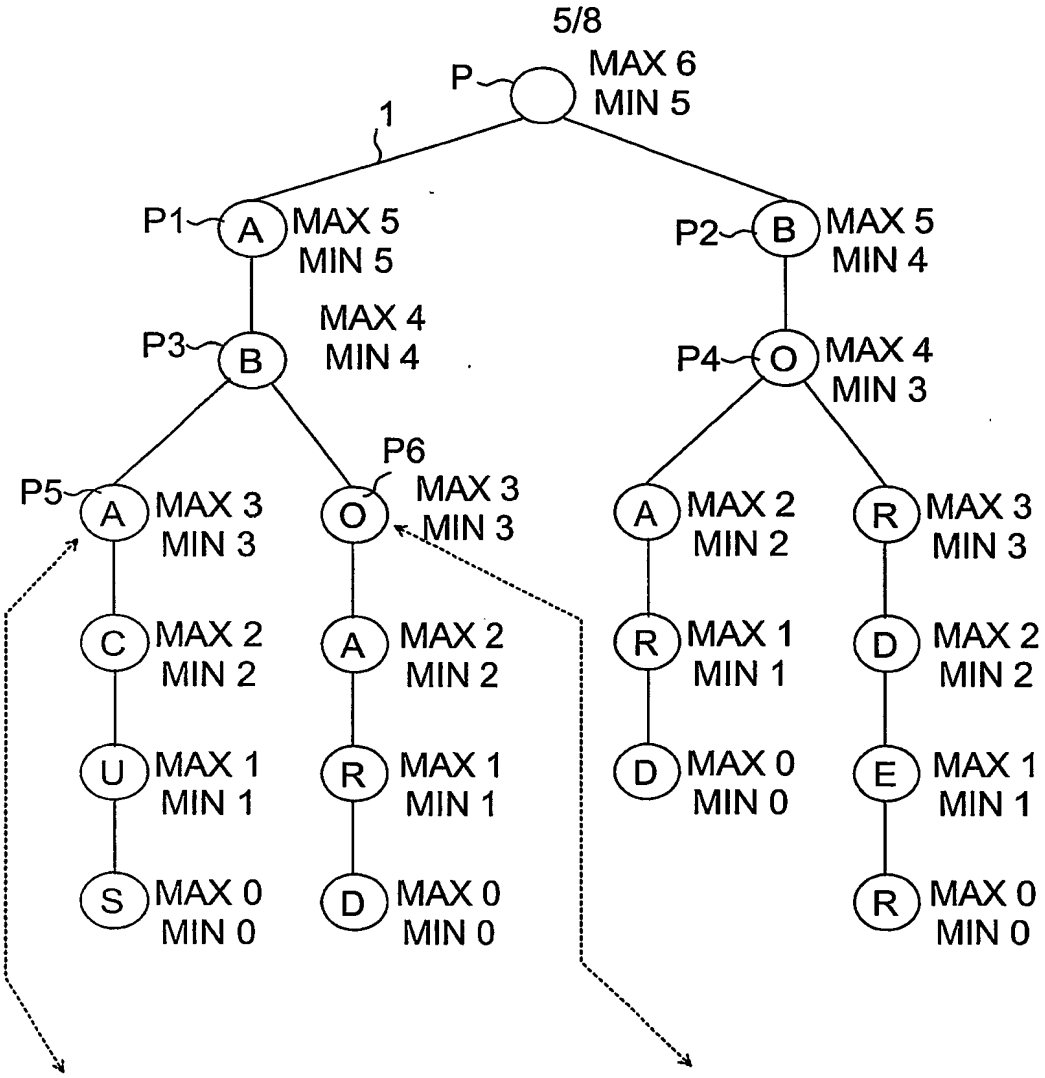
FIG. 2b



DISTANCE		A	B			D	R
	0	1	**2**			1	3
A	1	0	**1**			0	1
B	2	1	**0**			1	1
O	3	2	**1**			2	3
R	4	3	**2**			3	5
D	5	4	**3**			4	7

DISTANCE		B	O			D	R
	0	1	**2**			1	3
A	1	1	**2**			0	2
B	2	1	**2**			0	2
O	3	2	**1**			1	2
R	4	3	**2**			2	4
D	5	4	**3**			3	6

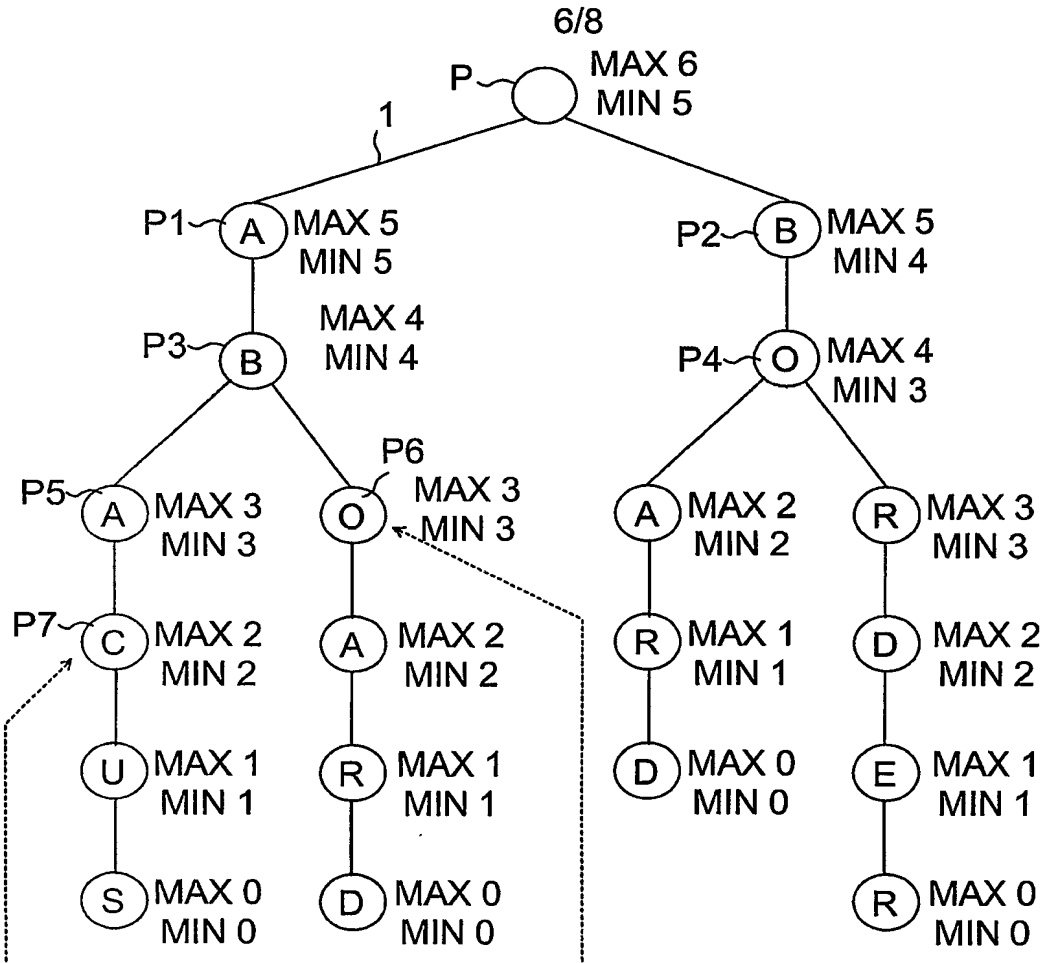
FIG. 2C



DISTANCE					D	R
		A	B	A		
	0	1	2	**3**	2	5
A	1	0	1	**2**	1	3
B	2	1	0	**1**	0	1
O	3	2	1	**1**	1	2
R	4	3	2	**2**	2	4
D	5	4	3	**3**	3	6

DISTANCE					D	R
		A	B	O		
	0	1	2	**3**	2	5
A	1	0	1	**2**	1	3
B	2	1	0	**1**	0	1
O	3	2	1	**0**	1	1
R	4	3	2	**1**	2	3
D	5	4	3	**2**	3	5

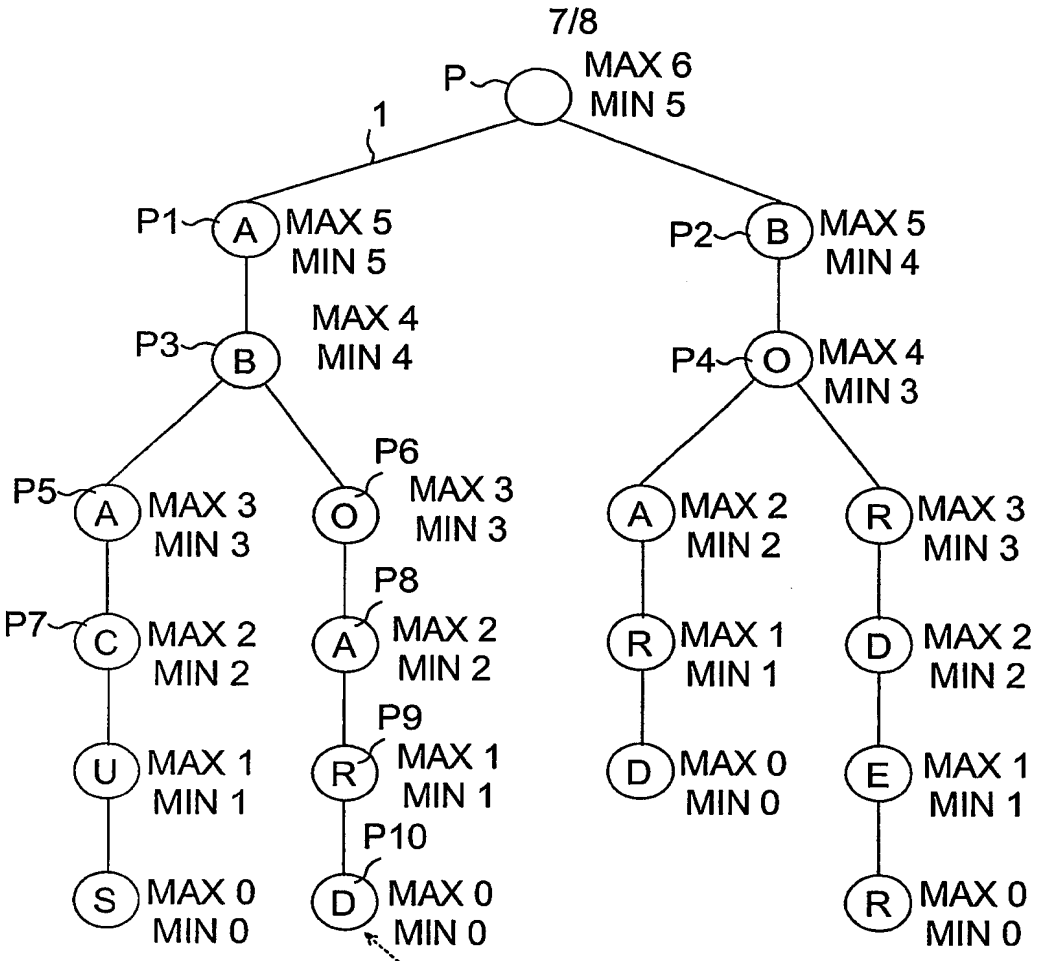
FIG. 2d



DISTANCE						D	R
		A	B	A	C		
	0	1	2	3	**4**	3	7
A	1	0	1	2	**3**	2	5
B	2	1	0	1	**2**	1	3
O	3	2	1	1	**2**	0	2
R	4	3	2	2	**2**	1	3
D	5	4	3	3	**3**	2	5

DISTANCE					D	R
	A	B	O			
0	1	2	**3**		2	5
A 1	0	1	**2**		1	3
B 2	1	0	**1**		0	1
O 3	2	1	**0**		1	1
R 4	3	2	**1**		2	3
D 5	4	3	**2**		3	5

FIG. 2e



	DISTANCE							D	R
		A	B	O	A	R	D		
	0	1	2	3	4	5	**6**	5	11
A	1	0	1	2	3	4	**5**	4	9
B	2	1	0	1	2	3	**4**	3	7
O	3	2	1	0	1	2	**3**	2	5
R	4	3	2	1	1	1	**2**	1	3
D	5	4	3	2	2	2	**1**	0	1

FIG. 2f

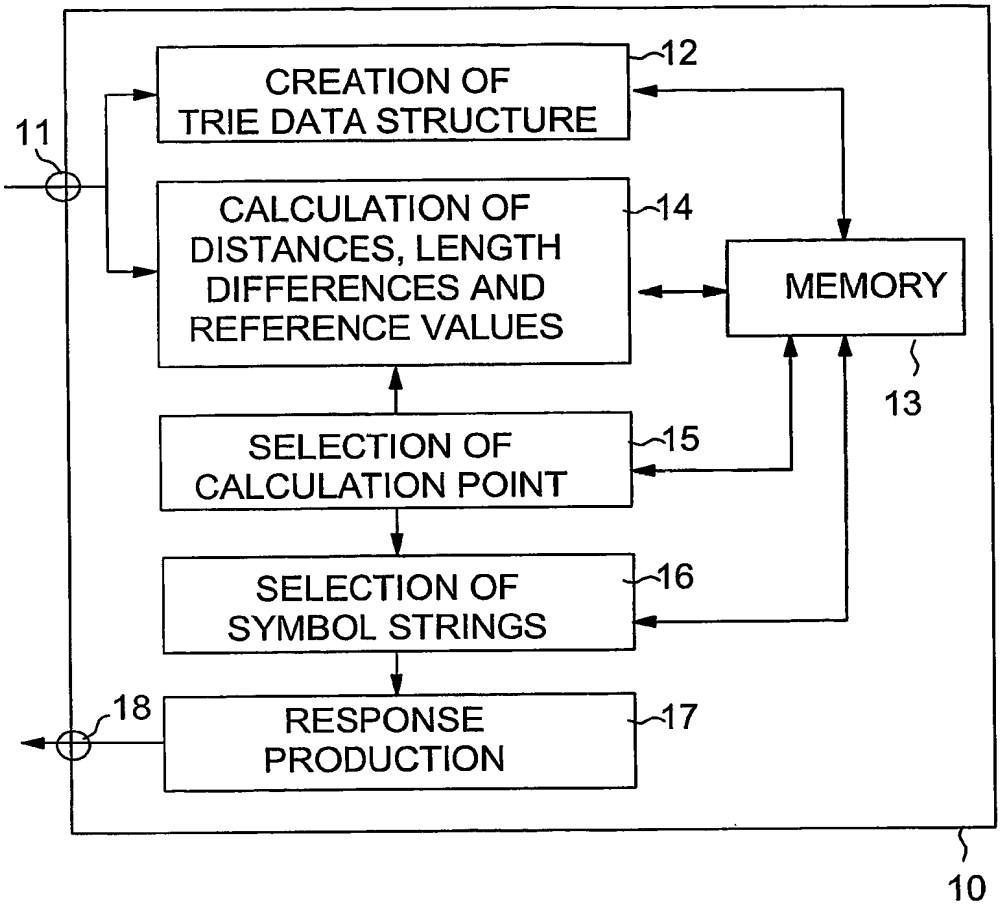

CREATION OF TRIE DATA STRUCTURE
12
11
CALCULATION OF DISTANCES, LENGTH DIFFERENCES AND REFERENCE VALUES
14
MEMORY
13
SELECTION OF CALCULATION POINT
15
SELECTION OF SYMBOL STRINGS
16
18
RESPONSE PRODUCTION
17
10

FIG. 3